Complete Summary

GUIDELINE TITLE

Specific management of IgA nephropathy: role of steroid therapy.

BIBLIOGRAPHIC SOURCE(S)

Thomas M. Specific management of IgA nephropathy: role of steroid therapy. Nephrology 2006 Apr;11(S1):S132-6.

Thomas M. Specific management of IgA nephropathy: role of steroid therapy. Westmead NSW (Australia): CARI - Caring for Australasians with Renal Impairment; 2005 Sep. 10 p. [13 references]

GUIDELINE STATUS

This is the current release of the guideline.

COMPLETE SUMMARY CONTENT

SCOPE

DISEASE/CONDITION(S)

- Immunoglobulin A (IgA) nephropathy
- Renal impairment
- Chronic kidney disease
- End-stage kidney disease

GUIDELINE CATEGORY

Management
Treatment

CLINICAL SPECIALTY

Family Practice
Internal Medicine
Nephrology
Pediatrics

INTENDED USERS

Physicians

GUIDELINE OBJECTIVE(S)

To evaluate the available clinical evidence pertaining to the impact of steroid therapy on renal functional decline in chronic immunoglobulin A (IgA) nephropathy

TARGET POPULATION

Adults and children with immunoglobulin A (IgA) nephropathy

INTERVENTIONS AND PRACTICES CONSIDERED

Steroid therapy

MAJOR OUTCOMES CONSIDERED

- Remission of proteinuria
- Renal function decline

METHODOLOGY

METHODS USED TO COLLECT/SELECT EVIDENCE

Searches of Electronic Databases

DESCRIPTION OF METHODS USED TO COLLECT/SELECT THE EVIDENCE

Databases searched: MeSH terms and text words for IgA nephropathy were combined with MeSH terms and text words for steroid therapy. The search was carried out in Medline (1966 to September Week 2, 2004). The Cochrane Renal Group Trials Register was also searched for trials not indexed in Medline.

Date of searches: 17 September 2004.

NUMBER OF SOURCE DOCUMENTS

Not stated

METHODS USED TO ASSESS THE QUALITY AND STRENGTH OF THE EVIDENCE

Weighting According to a Rating Scheme (Scheme Given)

RATING SCHEME FOR THE STRENGTH OF THE EVIDENCE

Levels of Evidence

Level I: Evidence obtained from a systematic review of all relevant randomized controlled trials (RCTs)

Level II: Evidence obtained from at least one properly designed RCT

Level III: Evidence obtained from well-designed pseudo-randomized controlled trials (alternate allocation or some other method); comparative studies with concurrent controls and allocation not randomized, cohort studies, case-control studies, interrupted time series with a control group; comparative studies with historical control, two or more single arm studies, interrupted time series without a parallel control group

Level IV: Evidence obtained from case series, either post-test or pretest/post-test

METHODS USED TO ANALYZE THE EVIDENCE

Review of Published Meta-Analyses
Systematic Review with Evidence Tables

DESCRIPTION OF THE METHODS USED TO ANALYZE THE EVIDENCE

Not stated

METHODS USED TO FORMULATE THE RECOMMENDATIONS

Expert Consensus

DESCRIPTION OF METHODS USED TO FORMULATE THE RECOMMENDATIONS

Not stated

RATING SCHEME FOR THE STRENGTH OF THE RECOMMENDATIONS

Not applicable

COST ANALYSIS

A formal cost analysis was not performed and published cost analyses were not reviewed.

METHOD OF GUIDELINE VALIDATION

Comparison with Guidelines from Other Groups
Peer Review

DESCRIPTION OF METHOD OF GUIDELINE VALIDATION

Recommendations of Others. Recommendations regarding the role of steroid therapy in the management of IgA nephropathy from the following groups were discussed: Kidney Disease Outcomes Quality Initiative, UK Renal Association, Canadian Society of Nephrology, European Best Practice Guidelines, and International Guidelines.

RECOMMENDATIONS

MAJOR RECOMMENDATIONS

Definitions for the levels of evidence (I–IV) can be found at the end of the "Major Recommendations" field.

Guidelines

Steroid therapy may protect against progressive renal damage in patients with immunoglobulin A (IgA) nephropathy with persistent proteinuria at risk of progressive renal failure. (Level I evidence, consistent effects)

Suggestions for Clinical Care

(Suggestions are based on Level III and IV evidence)

Who to Treat?

Patients with persistent and heavy proteinuria, renal impairment and/or hypertension at presentation are more likely to develop progressive renal impairment and seem to warrant intervention. It should be noted that large randomised controlled trials (RCTs) have included only those patients at risk for developing progressive renal disease and who are likely to respond to therapy (proteinuria, mild histopathological changes, etc).

At this time, there is no evidence to suggest patients with IgA nephropathy and established renal impairment (< 60mL/min) benefit from steroid therapy (Level III evidence). In addition, steroids do not prevent recurrent disease in transplant patients, and do not prevent progression in these patients.

Many patients with IgA nephropathy do not progress to renal impairment and do not require treatment. Patients with recurrent macroscopic haematuria in association with infection episodes tend to have a more benign course and can be managed expectantly in the absence of poor prognostic features. (Level III evidence)

A Threshold for Treatment?

The threshold for initiating steroid treatment is controversial. Some believe that greater than 1 g/d is a reasonable threshold for concern, while others would accept greater than 2 g/d. There is universal consensus that proteinuria greater than 3 g/d is associated with a very high likelihood of a subsequent progressive decline in renal function. (Level III evidence, consistent findings)

Histological features such as glomerular sclerosis, tubulo-interstitial atrophy or fibrosis and scarring also presage a poor outcome. (Level III evidence)

Patients with trivial (< 1.0 g/d) or no proteinuria, normal renal function, normal or easily-controlled hypertension who have only minor histological changes on biopsy are at low risk of progression. There is currently no data supporting the treatment of these patients. (Level III evidence)

However, even the evaluation of standard prognostic markers sometimes fails to correctly predict outcome, probably because of the heterogeneity of the disease and the discontinuous activity of some injuring mechanisms during its course. Even in the absence of specific therapeutic intervention, patients with IgA nephropathy should therefore continue to be monitored. Patients who subsequently develop markers of progressive renal disease should then be considered for intervention. (Level IV evidence)

What Dose of Steroid? What Duration?

Optimal dosing and duration of therapy remain to be established. The RCTs that have shown benefit from steroid therapy have treated with an initial dose of approximately 1 mg/kg/day with a gradual tapering over the duration of treatment.

A reduction in proteinuria after 6 months of treatment, or at the very least no increase in proteinuria during follow-up appear to presage a more favourable outcome. (Level III evidence)

Alternate day therapy may limit toxicity. (Level III evidence)

All the studies that have shown benefit from steroid therapy have treated for more than 4 months. (Level III evidence)

There are no studies comparing longer courses to continuous therapy *ad infinitum*.

Definitions:

Levels of Evidence

Level I: Evidence obtained from a systematic review of all relevant randomized controlled trials (RCTs)

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Level III: Evidence obtained from well-designed pseudo-randomized controlled trials (alternate allocation or some other method); comparative studies with concurrent controls and allocation not randomized, cohort studies, case-control studies, interrupted time series with a control group; comparative studies with historical control, two or more single arm studies, interrupted time series without a parallel control group

Level IV: Evidence obtained from case series, either post-test or pretest/post-test

CLINICAL ALGORITHM(S)

None provided

EVIDENCE SUPPORTING THE RECOMMENDATIONS

TYPE OF EVIDENCE SUPPORTING THE RECOMMENDATIONS

The type of supporting evidence is identified and graded for each recommendation (see "Major Recommendations").

BENEFITS/HARMS OF IMPLEMENTING THE GUIDELINE RECOMMENDATIONS

POTENTIAL BENEFITS

Appropriate management of patients with immunoglobulin A (IgA) nephropathy

POTENTIAL HARMS

Not stated

IMPLEMENTATION OF THE GUIDELINE

DESCRIPTION OF IMPLEMENTATION STRATEGY

An implementation strategy was not provided.

INSTITUTE OF MEDICINE (IOM) NATIONAL HEALTHCARE QUALITY REPORT CATEGORIES

IOM CARE NEED

Living with Illness

IOM DOMAIN

Effectiveness

IDENTIFYING INFORMATION AND AVAILABILITY

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ADAPTATION

Not applicable: The guideline was not adapted from another source.

DATE RELEASED

2006 Apr

GUIDELINE DEVELOPER(S)

Caring for Australasians with Renal Impairment - Disease Specific Society

SOURCE(S) OF FUNDING

Industry-sponsored funding administered through Kidney Health Australia

GUIDELINE COMMITTEE

Not stated

COMPOSITION OF GROUP THAT AUTHORED THE GUIDELINE

Author: Merlin Thomas

FINANCIAL DISCLOSURES/CONFLICTS OF INTEREST

All guideline writers are required to fill out a declaration of conflict of interest.

GUIDELINE STATUS

This is the current release of the guideline.

GUIDELINE AVAILABILITY

Electronic copies: Available in Portable Document Format (PDF) from the Caring for Australasians with Renal Impairment Web site.

Print copies: Available from Caring for Australasians with Renal Impairment, Locked Bag 4001, Centre for Kidney Research, Westmead NSW, Australia 2145

AVAILABILITY OF COMPANION DOCUMENTS

The following is available:

- The CARI guidelines. A guide for writers. Caring for Australasians with Renal Impairment. 2009 Aug. 6 p.

Electronic copies: Available from the Caring for Australasians with Renal Impairment (CARI) Web site.

PATIENT RESOURCES

None available

NGC STATUS

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